GEOLOGIC MAP OF MORGANTON QUADRANGLE, N.C. BY ARTHUR KEITH AND D. B. STERRETT UNITED STATES U. S. GEOLOGICAL SURVEY, OPEN FILE NORTH CAROLINA DEPARTMENT OF THE INTERIOR MORGANTON QUADRANGLE GEOLOGICAL SURVEY

> Contour interval 100 feet Datum is mean sea level

H M Wilson Geographer in charge
Topography by W Carvel Hall Chas E Cooke W L Miller and L S Leopold
Assistants W N Brown and G T Ford

DECLINAT ON 1903

Triangulation by U.S. Coast and Geodetic Survey and W.C. Kern Surveyed in 1899 and 1903

U. S. Geological Survey 54-14

OPEN FILE REPORT

This report is preliminary and has not been edited or reviewed or conformity with Geological Surv standards or nomenclature.

## EXPLANATION

(A) Cambrian carbonate rocks:

Shady marble (Lower Cambrian)

(B) Cambrian siliceous rocks:

Cehu

Erwin quartzite, Hampton shale, and Unicoi formation (Lower Cambrian)

(C) Igneous rocks:

Dike rocks (Triassic)

Linville metadiabase and Flat-top schist (Algonkian)

ARg

Cranberry, Henderson (and other?) granites (Archean) (includes small areas of Roan gneiss).

(D) Gneissic rocks:

Carolina gneiss (Archean)

Blowing Rock gneiss (Archean)

Fault

Geology by Arthur Keith and D. B. Sterrett; edited by Phillip B.

Note.-Field surveys were made by Arthur Keith in the Morganton quadrangle in the years 1896, 1899, 1900, 1901, and 1907. During the last year Keith was assisted by D. B. Sterrett who investigated the gold-bearing placers and monazite-bearing granites in the south part of the quadrangle. Traverse sheets available in the Geological Survey files show complete coverage of the quadrangle. The present map, which is based on these surveys, appears to be a generalization by Keith of a more detailed map, not at present available. Contacts shown were accurately located, but generalization was accomplished by grouping the rock units into four categories, which are indicated by the letters A, B, C, and D on the explanation above. Subdivision of these categories has been made by the editor on the basis of units mapped by Keith in the Cranberry and Mount Mitchell folios, which adjoin the Morganton quadrangle on the north and west. The classification used in the explanation is that in common use at the time of publication of the folios, but does not necessarily reflect accepted present usage.

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Polyconic projection